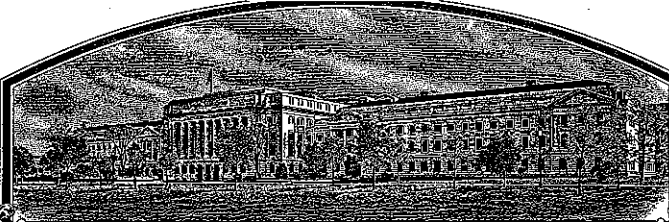


No.

200500276



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

D&H Technology Holding Company, LLC

Whereas, THERE HAS BEEN PRESENTED TO THE

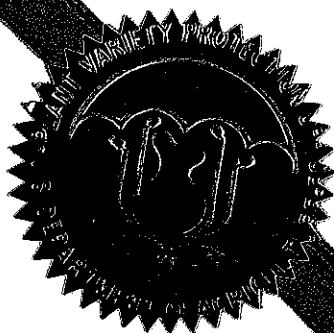
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED IN THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'06CX2S6DR'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-ninth day of September, in the year two thousand and six.

Attest:

Paul M. Zubeck

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Mr. Johnson
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER D&PL Technology Holding Company, LLC.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME 05X648DR		3. VARIETY NAME LW 4/24/06 PERM 4/25/06 06CX256DR	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) PO Box 157 100 Main Street Scott, Mississippi 38772 USA		5. TELEPHONE (include area code) (662) 742-4141		PVPO NUMBER 200500276	
6. FAX (include area code) (662) 742-3182		7. IF THE OWNER IS NOT A "PERSON" GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation		8. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware	
9. DATE OF INCORPORATION February 29, 1996		10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Delta and Pine Land Company Kelly Casavechia P.O. Box 157 Scott, MS 38772		FILING DATE JUNE 13, 2005	
11. TELEPHONE (include area code) (662) 742-4141		12. FAX (include area code) (662) 742-3182		FILING AND EXAMINATION FEE: \$ 3,652.00 DATE 6/13/05 CERTIFICATION FEE: \$ 682.00 DATE 9/12/05	
13. E_MAIL kelly.h.casavechia@deltapine.com		14. CROP KIND (Common Name) Cotton		15. GENUS AND SPECIES NAME OF CROP Gossypium hirsutum	
16. FAMILY NAME (Botanical) Malvaceae		17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse). a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)	
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)		24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.		25. SIGNATURE OF OWNER Don L. Keim NAME (Please print or type) Don L. Keim CAPACITY OR TITLE Cotton Breeder	
26. SIGNATURE OF OWNER William V. Hugie NAME (Please print or type) William V. Hugie CAPACITY OR TITLE Vice President/Director of Research		DATE June 10, 2005		DATE June 10, 2005	

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) Identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

Bollgard® ; Bollgard®II and Roundup Ready® cotton

THESE SEEDS ARE COVERED UNDER U. S. PATENTS 5,633,435; 5,500,365; 5,424,200; 5,359,142; 5,352,605; 5,530,196; 5,322,938; 5,196,525; 5,188,642; 5,164,316; 4,940,835; 5,717,084; 5,728,925; 5,804,425; 5,004,863; 5,159,135; 5,338,544; 5,362,865; 5,659,122; 5,728,925; 5,880,275; 6,174,724; 6,489,542

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. <http://www.ams.usda.gov/lsg/seed/lsg-sd.htm>

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U. S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

EXHIBIT A

**DELTA AND PINE LAND COMPANY'S APPLICATION FOR
05X648DR '06CX256DR'**

ORIGIN AND BREEDING HISTORY**1. GENEALOGY**

05X648DR is a bulk of selections derived from a backcross involving DP33[531][15985]-00BC2F3 selections as a donor parent and DP 555 BG/RR as the recurrent parent. DP33[531][15985]-00BC2F3 has the Monsanto developed genes from *Bacillus thuringiensis* (Bt, 531 construct and Bt, 15985 construct) that provides tolerance to certain lepidopteron insects. DP 555 BG/RR has the Monsanto developed genes from *Bacillus thuringiensis* (Bt, 531 construct) and the EPSPS gene (1445 construct) that gives tolerance to certain lepidopteron insects and the herbicide glyphosate, respectively.

2. SELECTION AND MULTIPLICATION

<u>Year</u>	<u>Location</u>	<u>Generation</u>	<u>Selection</u>
2000	Scott, Ms	F0	Cross made
2000/01	Winter nursery – Costa Rica	BC1F0	Cross made
2001	Scott, Ms	BC2F0	Cross made
2001	Greenhouse - Scott, Ms	BC2F1	Selfed
2002/03	Costa Rica	BC2F2	Plants screened and selfed
2003	Progeny Rows – Costa Rica	BC2F3	Individual lines advanced
2003/2004	Breeders Increase – Costa Rica	BC2F4	Individual lines increased
2004	Foundation Increase	BC2F5	Four lines bulked
2004/05	Foundation Increase	BC2F6	Bulk increased
2005	Production Increase	BC2F7	Bulk increased

Selection criteria used in the BC2F2 through BC2F5 generations included PCR screening plants for presence and homozygosity of the transgenes. Selection criteria used in the BC2F3 and BC2F4 generations included agronomic traits (plant type, plant maturity, plant height and storm resistance), lint percent and leaf pubescence. Additional selection criteria used in the BC2F4 generation included fiber quality traits (micronaire, length and strength). Selection criteria in the BC2F6 generation included lint yield, in addition to the traits mentioned above.

A bulk of BC2F5 lines was designated 05X648DR in 2004.

STATEMENT ON UNIFORMITY AND STABILITY

05X648DR has been observed every generation since 2003 and has shown to be uniform and stable. Less than 2% of the plants do not contain all of the gene insertions 1445, 531 and 15985.

EXHIBIT B**DELTA AND PINE LAND COMPANY'S APPLICATION FOR
05X648DR '06CX256DR'****STATEMENT OF DISTINCTNESS**

05X648DR is a picker-type upland variety. The picker-type varieties as a group are distinguished from stripper varieties primarily by a more open or loose boll type. The picker-type varieties are distinguished from Acala-type varieties primarily by earlier maturity, higher heat tolerance, shorter fiber length and lower fiber strength.

05X648DR is different from many other picker-type varieties in that its plants possess three transgenes (1445, 531 and 15985 gene insertions) developed by the MONSANTO COMPANY. The gene insertion 1445 causes plants to be tolerant to the herbicide ROUNDUP (glyphosate). The gene insertions 531 and 15985 (in combination commercialized under the trade name Bollgard II) enables plants to be tolerant to certain lepidopteron insects.

DP 555 BG/RR was used as the most similar variety because it has many characteristics in common with 05X648DR. Also, DP 555 BG/RR was used as the recurrent parent in the backcross from which 05X648DR was derived. In comparing 05X648DR to DP 555 BG/RR, the most distinguishing characteristic is the gene insertion 15985. 05X648DR also differs from DP 555BG/RR in lint percent, fiber maturity ratio, plant height and seed index.

Novelty of 05X648DR is claimed on the following characteristics, for which there are significant differences from the comparison variety, at the 5% level of probability or less.

Trait	05X648 DR	DP 555 BG/RR	Probability	Reference Table
Gene insertion 15985	Present	Absent		
Lint percent	41.78	44.07	<0.0001	1
Fiber maturity ratio	86.45	86.19	0.0364	1
Plant height	109.2	119.8	0.0015	1
Seed Index	9.47	8.38	0.0131	1

Supporting Tables:

<u>Table</u>	<u>Test</u>	<u>Years</u>	<u>Locations</u>
1	Head to Head Comparisons	2004	15 tests - Beltwide
2	PVP Trial	2004	Scott. Ms
3	PVP Trial - Final Plant Map	2004	Scott, Ms

Table 1. Head to head comparisons of 05X648DR with DP 555 BG/RR

Year	Reg- ion	Expt	City	State	Lint Percent		Micronaire		Length		Uniformity Ratio		Strength		Elongation		Fiber Maturity Ratio		Plant Height		Maturity		Seed Index		Lint Index	
					05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR	05X648 DR	DP 555 BG/RR
2004	1	44HV0110	HV	SC	39.0	43.0	4.1	4.0	1.14	1.15	81.7	81.8	31.4	32.6	11.6	11.6	86.0	85.0	123.8	133.4	27.5	27.5				
2004	2	44BB0216	BB	GA	39.6	41.8	4.3	4.3	1.16	1.15	83.1	82.9	31.1	31.5	12.4	12.6	85.3	85.0	101.0	112.4						
2004	2	44WC0214	WC	GA	41.4	42.8	4.1	3.9	1.14	1.13	81.5	82.3	28.7	28.8	11.5	11.7	85.3	84.8	95.3	109.9						
2004	2	44WU0215	WU	GA	41.3	42.0	4.1	4.1	1.10	1.10	81.2	81.0	28.8	28.8	11.0	10.9	86.0	85.8	85.1	96.5						
2004	4	44NE0408	NE	LA	43.3	44.6	4.2	4.2	1.17	1.17	82.7	83.1	33.9	31.8	12.0	12.2	85.8	85.8	124.0	122.6			9.3	8.5	7.4	6.8
2004	4	44PB0409	PB	MS	40.3	43.2	4.4	4.6	1.17	1.14	82.9	81.8	33.4	31.4	10.7	11.2	87.0	87.0								
2004	4	44PU0410	PU	MS	41.1	44.0	4.7	4.4	1.13	1.14	82.2	82.8	30.6	32.2	11.6	11.9	87.0	86.3								
2004	4	44SM0406	SM	MS	43.6	46.9	4.4	4.3	1.13	1.14	82.9	82.8	33.0	33.0	11.0	11.3	86.8	86.3	106.3	125.9	72.5	70.0	9.7	8.6	7.5	7.4
2004	4	44SM0443	SM	MS	41.3	44.7	4.8	4.8	1.13	1.13	83.3	83.0	27.3	27.3	10.5	10.4	87.8	87.8	119.8	129.3			9.4	8.1	6.6	6.6
2004	4	44WU0407	WI	LA	43.9	46.7	4.7	4.7	1.14	1.11	84.2	84.3	31.3	30.7	12.3	11.9	86.3	86.5	106.7	104.1						
2004	5	44AO0543	AO	OK	43.1	46.9	4.6	4.6	1.15	1.18	81.9	81.7	30.1	31.1	11.1	11.0	87.0	87.5	84.7	91.4	31.7	25.0				
2004	5	44SA0544	SA	TX	42.3	44.4	4.0	4.0	1.12	1.12	82.3	83.0	25.3	25.9	12.6	12.7	84.5	84.0	104.1	114.3	40.0	15.0				
2004	7	44CG0722	CO	AZ	42.3	43.4	5.0	4.7	1.12	1.15	82.0	83.1	29.7	28.5	11.3	11.7	87.8	86.8	121.9	152.4	74.0	70.0				
2004	7	44CO0718	CO	AZ	42.8	43.6	5.2	5.0	1.14	1.15	82.5	82.0	34.4	30.2	11.0	11.3	88.3	88.0	137.2	144.8	75.0	70.0				
2004	7	44YU0711	YU	AZ	41.6	43.1	4.8	4.7	1.17	1.14	83.6	83.0	26.3	26.8	11.9	10.8	86.3	86.5								
Average					41.78	44.07	4.48	4.41	1.140	1.139	82.52	82.56	30.34	30.04	11.49	11.54	86.45	86.19	109.2	119.8	53.4	46.3	9.47	8.38	7.17	6.96
No. Comparisons					15		15		15		15		15		15		15		12		6		3		3	
Difference					-2.29		0.07		0.000		-0.05		0.30		-0.05		0.27		-10.6		7.2		1.09		0.21	
F ratio - Analysis of Variance					63.014		4.206		0.009		0.096		0.581		0.267		5.356		17.738		3.823		74.697		1.732	
Probability of difference - F test					<0.0001		0.0595		0.9277		0.7308		0.4587		0.6136		0.0364		0.0015		0.1079		0.0131		0.3188	

Values in red are derived from the Analysis of Variance routine in the EXCEL - ANALYSIS TOOL.PAK add-in

Table 2. PVP Trial - 2004 - Scott, MS

Ent Xno	Lint				Seed				Cm to				Seed			
	Percent	Mic	Len	Ur	T1	E1	Mr	FFB	Seeds	Cotton	Lint	Seed	Lint	Seed	Lint	Index
1 DP 424 BGII/RR	38.6	4.6	1.13	84	27.3	12.9	85.8	10.7	33.0	5.7	2.2	10.7	6.7			
2 05X648DR	41.3	4.8	1.13	83	27.3	10.5	87.8	11.3	33.0	5.3	2.2	9.4	6.6			
3 DP 555 BG/RR	44.7	4.8	1.13	83	27.3	10.4	87.8	12.5	33.1	4.9	2.2	8.1	6.6			
12 DP 488 BG/RR	41.8	4.5	1.18	85	31.3	10.2	87.3	13.1	29.3	5.2	2.1	10.3	7.4			
14 DP 455 BG/RR	43.3	4.1	1.15	84	30.3	10.0	87.0	10.8	32.2	5.1	2.2	9.0	6.9			
15 DP 449 BG/RR	40.5	4.7	1.15	84	31.2	9.9	88.0	11.0	31.4	5.1	2.1	9.7	6.6			
Mean	42.0	4.8	1.18	86	30.8	11.8	87.3	10.4	32.2	5.9	2.5	10.5	7.7			
Cv	1.4	2.8	1.6	0.8	3.1	4.5	0.7	22.3	7.5	6.3	6.4	3.5	3.7			
Lsd .05	0.7	0.2	0.02	0.8	1.1	0.6	0.7	2.9	2.8	0.4	0.2	0.4	0.3			
No. Reps	4	4	4	4	4	4	4	4	4	4	4	4	4			
Heritability	0.98	0.90	0.88	0.69	0.90	0.87	0.70	0.49	0.62	0.81	0.85	0.95	0.94			
R-squared	0.93	0.75	0.72	0.44	0.76	0.90	0.78	0.30	0.36	0.58	0.66	0.87	0.85			

'06CX2SDR'

Explanations:	
Lint Percent	= percentage of the seed cotton that is lint, handpicked samples
Mic	= micronaire, measure of fiber fineness (high = coarse fiber)
Len	= fiber length (inches)
Ur	= uniformity ratio, proportion of uniform length fibers
T1	= fiber strength, grams per tex (high = stronger fiber)
E1	= elongation, measure of fiber elasticity, (high = more elastic)
Mr	= fiber maturity ratio
Cm to FFB	= cm to first fruiting branch
Seed/boll	= number of seeds per boll, handpicked samples
Seed cotton/boll	= weight of seedcotton per boll, handpicked samples
Lint/boll	= weight of lint per boll, handpicked samples

Table 3. PVP Trial - Scott, MS - 2004 - Plant Map Summary

Ent	Variety	Total Nodes	Nodes to FFB	Fruiting Branches	HNR	NAWF 8-Jul	Date of First Flower
1	DP 424 BGII/RR	21.0	6.0	15.1	2.15	8.0	4-Jul
2	05X648DR	24.0	6.4	17.6	1.97	9.0	2-Jul
3	DP 555 BG/RR	24.5	6.3	18.2	2.08	9.1	3-Jul
12	DP 488 BG/RR	21.4	5.5	15.9	2.11	8.7	3-Jul
14	DP 455 BG/RR	22.9	6.0	17.0	2.25	8.5	1-Jul
15	DP 449 BG/RR	21.9	5.7	16.3	2.22	8.6	5-Jul
	Mean	21.8	5.9	16.0	2.21	8.4	3-Jul
	LSD 0.05	1.5	0.5	1.4	0.14	0.7	NS
	Std. Error	0.5	0.2	0.5	0.05	0.2	1
	P	<.0001	<.0001	<.0001	<.0001	0.000	0.827
	C.V.%	4.9	6.3	6.2	4.5	5.6	1.3
Planted 4/29/2003		HNR = Height to Node Ratio NAWF = Node above white flower					

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT C
(COTTON)**

**OBJECTIVE DESCRIPTION OF VARIETY
COTTON (*Gossypium* spp.)**

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
D&PL Technology Holding Corp.	05X648DR	'86CX256DR'
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)		FOR OFFICIAL USE ONLY
PO Box 157 100 Main Street Scott, MS 38772 USA		PVPO NUMBER 200500276

Place the appropriate data that describes the varietal characteristic of this variety in the space provided. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characters marked with an asterisk * indicate necessary characters to be measured.

SPECIFIC VARIETIES USED FOR COMPARISON AS CHECK VARIETIES IN THIS APPLICATION: Use standard regional check varieties which are adapted to your area. One of the comparison varieties must be the most similar variety used in Exhibit B.

Variety 1. DP 555 BG/RR Variety 2. _____ Variety 3. _____

*1. SPECIES:

 X *G. hirsutum* L. *G. barbadense* L.

*2. AREA(S) OF ADAPTATION: (A = Adapted, NA = Not Adapted, NT = Not Tested)

<u> A </u> Eastern <u>NT</u> Plains <u> </u> Other (Specify): _____	<u> A </u> Delta <u>NT</u> Western	<u> A </u> Central <u> A </u> Arizona	<u>NT</u> Blacklands <u>NT</u> San Joaquin
--	---	--	---

3. GENERAL: Characteristics which are known to be variable but are still useful for a meaningful description of the variety.

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Plant Habit: Spreading, Intermediate, Compact	<u>Intermediate</u>	<u>Intermediate</u>	_____	_____
Foliage: Sparse, Intermediate, Dense	<u>Intermediate</u>	<u>Intermediate</u>	_____	_____
Stem Lodging: Lodging, Intermediate, Erect	<u>Erect</u>	<u>Erect</u>	_____	_____
Fruiting Branch: Clustered, Short, Normal	<u>Normal</u>	<u>Normal</u>	_____	_____

3. GENERAL: (continued)

200500276

Growth:Determinate, Intermediate,
Indeterminate

Indeterminant Indeterminant

Leaf Color:Greenish yellow, Light green,
Medium green, Dark green

Medium green Light green

Boll Shape: Length less than width,

Length equal to width,

Length more than width

Length>width Length>width

Boll Breadth: Broadest at base,

Broadest at middle

Broadest at middle Broadest at middle

***4. MATURITY:** (50 % Open bolls; Preferred method; Describe method if different method was used.)

% open bolls rating taken on a given date before harvest

% open bolls 53.4 46.3

5. PLANT:**Cm to 1st Fruiting Branch:**

(from cotyledonary node)

11.3 12.5

No. of Nodes to 1st Fruiting Branch:

(excluding cotyledonary node)

6.4 6.3

Mature Plant Height cm:

(from cotyledonary node to terminal)

109.2 119.8

***6. LEAF:** Upper most, fully expanded leaf.**Type:** Normal, Sub Okra,

Okra, Super Okra

Normal Normal

Pubescence: Absent, Sparse,Medium, Dense **OR** Trichomes/cm²

(Bottom surface excluding veins)

Sparse Sparse

Nectaries: Present or Absent

Present Present

***7. STEM PUBESCENCE:**

Glabrous, Intermediate, Hairy

Intermediate Intermediate

***8. GLANDS:** (Gossypol) Absent, Sparse, Normal, More Than Normal**Leaf:**

Normal Normal

Stem:

Normal Normal

Calyx Lobe: (normal is absent)

Normal Normal

9. FLOWER:*Petals:** Cream, Yellow

Cream Cream

Pollen: Cream, Yellow

Cream Cream

Petal Spot: Present, Absent

___ Absent ___

___ Absent ___

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*10. SEED:

Seed Index:

(g/100 seed, fuzzy basis)

___ 9.47 ___

___ 8.38 ___

Lint Index:

(g lint/100 seeds)

___ 7.17 ___

___ 6.96 ___

*11. BOLL:

Lint Percent:

___ X ___ Picked

___ Pulled

___ 41.78 ___

___ 44.07 ___

OR

Gin Turnout:

___ Picked

___ Stripped

Number of Seeds per Boll

___ 33.0 ___

___ 33.1 ___

Grams Seed Cotton per Boll

___ 5.3 ___

___ 4.9 ___

Number of Locules per Boll

___ 4-5 ___

___ 4-5 ___

Boll Type:

(Stormproof, Storm Resistant, Open)

___ Open ___

___ Open ___

12. FIBER PROPERTIES:

Specify Method (HVI or other):

___ HVI ___

* Length: (inches, 2.5% SL)

___ 1.140 ___

___ 1.139 ___

* Uniformity: (%)

___ 82.52 ___

___ 82.56 ___

* Strength, T1 (g/tex)

___ 30.34 ___

___ 30.04 ___

* Elongation, E1 (%)

___ 11.49 ___

___ 11.54 ___

* Micronaire:

___ 4.48 ___

___ 4.41 ___

Fineness (Source ___)

___ NT ___

___ NT ___

Yarn Tenacity: (cN/tex, 27 tex)

___ NT ___

___ NT ___

Yarn Strength: (lbs. 22's)

___ NT ___

___ NT ___

13. DISEASES: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

___ NT ___ *Alternaria macrospora*

___ NT ___ Fusarium Wilt

___ NT ___ Anthracnose

___ NT ___ Phymatotrichum Root Rot

___ NT ___ Ascochyta Blight

___ NT ___ *Pythium* (specify species)

___ NT ___ Bacterial Blight (Race 1)

___ NT ___ *Rhizoctonia solani*

☐ NT ☐ Bacterial Blight (Race 2)

☐ NT ☐ Southwestern Cotton Rust

☐ NT ☐ Bacterial Blight (Race)

☐ NT ☐ Thielaviopsis basicola

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13. DISEASES : (continued)

☐ NT ☐ Diplodia Boll Rot

☐ NT ☐ Verticillium Wilt

☐ Other (specify)

14. NEMATODES, INSECTS AND PESTS: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

☐ NT ☐ Root-Knot Nematode

☐ MS ☐ Reniform Nematode

☐ NT ☐ Boll Weevil

☐ NT ☐ Grasshopper (specify species):

☐ NT ☐ Bollworm

☐ NT ☐ Lygus (specify species):

☐ NT ☐ Cotton Aphid

☐ NT ☐ Pink Bollworm

☐ NT ☐ Cotton Fleahopper

☐ NT ☐ Spider Mite (specify species):

☐ NT ☐ Cotton Leafworm

☐ NT ☐ Stink Bug (specify species):

☐ NT ☐ Cutworm (specify species):

☐ NT ☐ Thrips (specify species):

☐ NT ☐ Fall Armyworm

☐ NT ☐ Tobacco Bud Worm

☐ Other (specify):

15. COMMENTS: Present any additional information that cannot adequately be described in 1 through 13 which significantly distinguishes your variety.

05X648DR contains three proprietary genes, patented by the Monsanto Company and licensed to D&PL. One gene encodes a protein providing resistance to the herbicide glyphosate (ROUNDUP®), and the two additional genes with different active Bt endotoxins (BOLLGARD® AND BOLLGARD®II).

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S) D&PL TECHNOLOGY HOLDING COMPANY, LLC.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER 05X648DR	3. VARIETY NAME '06CX2S6DR'
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) P.O. Box 157 Scott, Mississippi 38772	5. TELEPHONE (Include area code) (662) 742-4141	6. FAX (Include area code) (662) 742-3182
7. PVPO NUMBER 200500276		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (If needed, use the reverse for extra space):

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PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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